

REMARKS

Claims 7, 16, and 34 have been amended. No claims have been canceled.
Claims 39-42 have been added.

Specification/Figure Amendments

Applicant respectfully submits that amendments to the specification and to Figure 7C correct typographical errors. For example, changes made to paragraph [0039] and paragraph [0040] of the specification are supported by Figures 7B and 7C. Similarly, support for a change to Figure 7C is found in the specification at least at [0048], because the counter must increment until the counter value is greater than the time limit for the timer to expire. Applicant respectfully submits that a person of ordinary skill in the art would realize that an arrow should point from operation 719 to operation 717 to keep the counter incrementing until the counter value is greater than the time limit in Figure 7C (so that the timer can expire as discussed at least at [0048] of the specification), rather than from operation 719 to operation 715 as previously illustrated in Figure 7C. Therefore, Applicant respectfully requests that the Examiner enter the amendments to the specification and to Figure 7C.

Claim Rejections – 35 USC § 102(e)

Claims 12-25 are rejected under 35 U.S.C. 102(e) as being unpatentable over U.S. Patent 6,694,450 to Kidder et al. Applicant respectfully reserves the right to swear behind the Kidder reference at a later time.

The backup system of Kidder discloses “a distributed redundancy system...that provides software redundancy (backup)” (Kidder, col. 3, line 8-9). In the backup system of Kidder, “as state changes, the primary instantiation (also called the primary process) passes dynamic state information to...the backup instantiation (i.e., check-pointing)” (Kidder, col. 3, lines 42-44). In Kidder, after a primary process restarts, “a copy of the last known dynamic state (i.e., the backup state) can be retrieved from a backup process” (Kidder, col. 3, lines 64-67). To “synchronize [the] retrieved...backup state” (Kidder, col. 4, lines 1-2), the primary process uses the “dynamic state of associated other processes” (Kidder, col. 4, lines 1-2).

Thus, for a primary process being restarted, Kidder retrieves the previously backed up data of that process (“retrieved data”) from the “backup process” and synchronizes it with “dynamic state” data from “other processes”. Kidder doesn’t even address the problem of how “other processes” deal with (such as synchronize) old data they previously received from a dead primary process as well as new data they receive after the dead primary process restarts. Furthermore, a time period is not considered for synchronizing to take place in Kidder, because the “retrieval and audit processes will normally be completed very quickly” (Kidder, col. 4, lines 6-7).

Claims 12-19

In contrast, Applicant respectfully submits that Kidder does not disclose at least:

- 1) “the first network process to generate a first set of data after restarting and the second network process to synchronize the first set of data with a second set of data generated by the first network process before restarting upon determining a time period has not expired, the time period beginning when the first network process dies; and a

traffic card ... to process a set of traffic with the synchronized first and second set of data" (Claim 12); and 2) "the first network process to generate a first set of data before restarting and a second set of data after restarting, the second network process to synchronize the first and second set of data upon determining a time period has not expired, the time period beginning when the first network process dies; and a second processor ...to process a set of traffic using the first set of data before the first network process restarts and a third set of data after the first network process restarts." (Claim 16).

Furthermore, Applicant respectfully submits that dependent claims 13-15 and 17-19 are allowable at least because they depend on an allowable independent claim.

Claims 20-25

In contrast, Applicant respectfully submits that Kidder does not disclose at least:

1) "a first network process... to generate a first set of data before restarting and a second set of data after restarting... a second network process... using the first and second set of data if a time period has not expired, the time period beginning when the first network process dies; and...third memory to store....a synchronized set of the first and second set of data after the first network process restarts. " (Claim 20); and 2) "a first network process...to generate a first set of data before restarting and a second set of data after restarting; and a second network element...to start a counter upon determining the first network process has died,...and to synchronize the first and second set of data upon determining the counter has not exceeded a time period." (Claim 24).

Furthermore, Applicant respectfully submits that dependent claims 21-23 and 25 are allowable at least because they depend on an allowable independent claim.

Claim Rejections – 35 USC § 103

Claims 1-11 and 26-38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 6,694,450 to Kidder et al. in view of the Applicant's background.

No Suggestion to Combine

Applicant respectfully submits that there is no suggestion to combine Kidder with the stale data removal process in the Applicant's background. Kidder is a backup system, having "a distributed software redundancy design..to minimize network outages and other problems...by spreading software backup...across multiple elements" (Kidder Abstract). The Office Action (mailed on August 20, 2004) agrees with Applicant that Kidder does not discuss at least the stale data removal process because the Office Action says that "KIDDER does not teach if the time period expires...clearing the second set of data" (Office Action, pg. 7, lines 13).

If anything, Kidder teaches away from even considering a time period to clear data, because the "retrieval and audit process will normally be completed very quickly, resulting in no discernable service disruption" (Kidder, col. 3, lines 52-54). In contrast, the Applicant's background deals with "if a requesting process does not receive a response within a certain time period, then the requesting process will mark the data from the timed out process as stale...When time timer expires, the stale data is removed" (Specification, [0007]). The Kidder reference has no need for marking the data from the timed out process as stale because the "retrieval and audit processes will

normally be completed very quickly, and in the case of a network device, quick resynchronization may avoid losing network connections, resulting in no discernable service disruption” (Kidder, col. 4, lines 6-10).

Noticeably, the Office Action offers no motivation to combine Kidder with the Applicant’s background. Applicant requests that the Examiner clarify the position of obviousness based on “one of ordinary skill in the art” (Office Action, pg. 7, line 1-2) that it would have been obvious to one of ordinary skill in the art to modify the distributed process redundancy of Kidder et al.” (December 10, 2004 Office Action, page 7, line 2-3). Applicant requests that the Examiner to provide an objective reason to combine the references per MPEP 2143.01. Furthermore, if the rejection is based on facts within the personal knowledge of the Examiner, the Applicant requests that the Examiner provide an affidavit stating specifically why the motivation to combine is common knowledge in the art per 37 CFR 1.104(d)(2).

Combination is Lacking

Nonetheless, even if the combination is proper, the combination would be the backup system of Kidder with the stale data removal process of the Applicant’s background. Thus, the combination would be trying to solve two different problems in two different places. The first problem is preparing data for the restarting process (for a primary process being restarted, retrieving the previously backed up data of that process (“retrieved data”) from the “backup process” and synchronizing it with “dynamic state” data from “other processes”). The second problem is deciding when non-restarting processes (“other processes”) delete stale data (the other processes being “unaware of the state of the timed out process” when they do not “receive a response

within a certain time period” and removing stale data when a long timer expires (Specification, [0007])). Thus, the combination doesn’t even address the problem of how “other processes” synchronize old data they previously received from a dead primary process as well as new data they receive after the dead primary process restarts. The combination does not discuss a second network process, which was a recipient of data from a first network process before the first network process died, trying to hang on to that data after learning the first network process is dead, and synchronizing it with new data from the restarted first network process if a time period has not expired.

Therefore, the combination does not teach or suggest a 1) “receiving a first set of data from a network process....synchronizing the first set of data with a second set of data if the time period does not expire, the second set of data received from the network process after the network process restarts.” (Claim 1, 28); 2) “a first set of data is generated by the network process before a time period expires, then synchronizing the first set of data with a second set of data, the second set of data having been generated by the network process before the death of the network process “ (Claim 7, 34)

Applicant respectfully submits that dependent claims 2-6, 8-11, 26-27, 29-33, and 35-38 are allowable for at least the reason that they depend on an independent allowable claim.

New Claims

Applicant respectfully requests that the Examiner consider new claims 39-42. Applicant submits that new claims 39-42 add no new matter, and are allowable at least because claim 39, from which claims 40-42 depend, requires at least “A method of a first network process, comprising: receiving data from a second network process; receiving a death notification regarding the second network process; determining the

data received before the death of the second network process is stale based on the death notification; receiving new data from the second network process after it has been restarted; storing the new data as a temporary data; and synchronizing the stale data and the new data if a done signal is received from the second network process before a timer expires.” (Claim 39). Applicant respectfully submits that claims 40-42 are allowable at least because they depend on an allowable independent claim.

Invitation for a telephone interview


The Examiner is invited to call the undersigned at 408-720-8300 if there remains any issue with allowance of this case.

Charge our Deposit Account

Please charge any shortages and credit any overages to Deposit Account No.

Respectfully submitted,
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: 1/19/05



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AMENDMENTS TO THE DRAWINGS:

The attached drawing sheet of Figure 7C replaces the original Figure 7C drawing sheet. An arrow on the original Figure 7C from operation 719 to operation 715 has been corrected to point from operation 719 to operation 717 in the attached drawing sheet. Support for this change is found in the specification at least at [0048], because the counter must increment until the counter value is greater than the time limit for the timer to expire. Applicant respectfully submits that a person of ordinary skill in the art would realize that the arrow should point from operation 719 to operation 717 to keep the counter incrementing until the counter value is greater than the time limit, so that the timer can expire as discussed at least at [0048].

Attachment: Replacement Sheet